Bringing Long-Term Care Home

A Proposal to Create a Virtual Long-Term Care @ Home Program to Support a More Cost-Effective and Sustainable Way to Provide Long-Term Care Across Ontario

NATIONAL INSTITUTE ON AGEING

November, 2020

Table of Contents

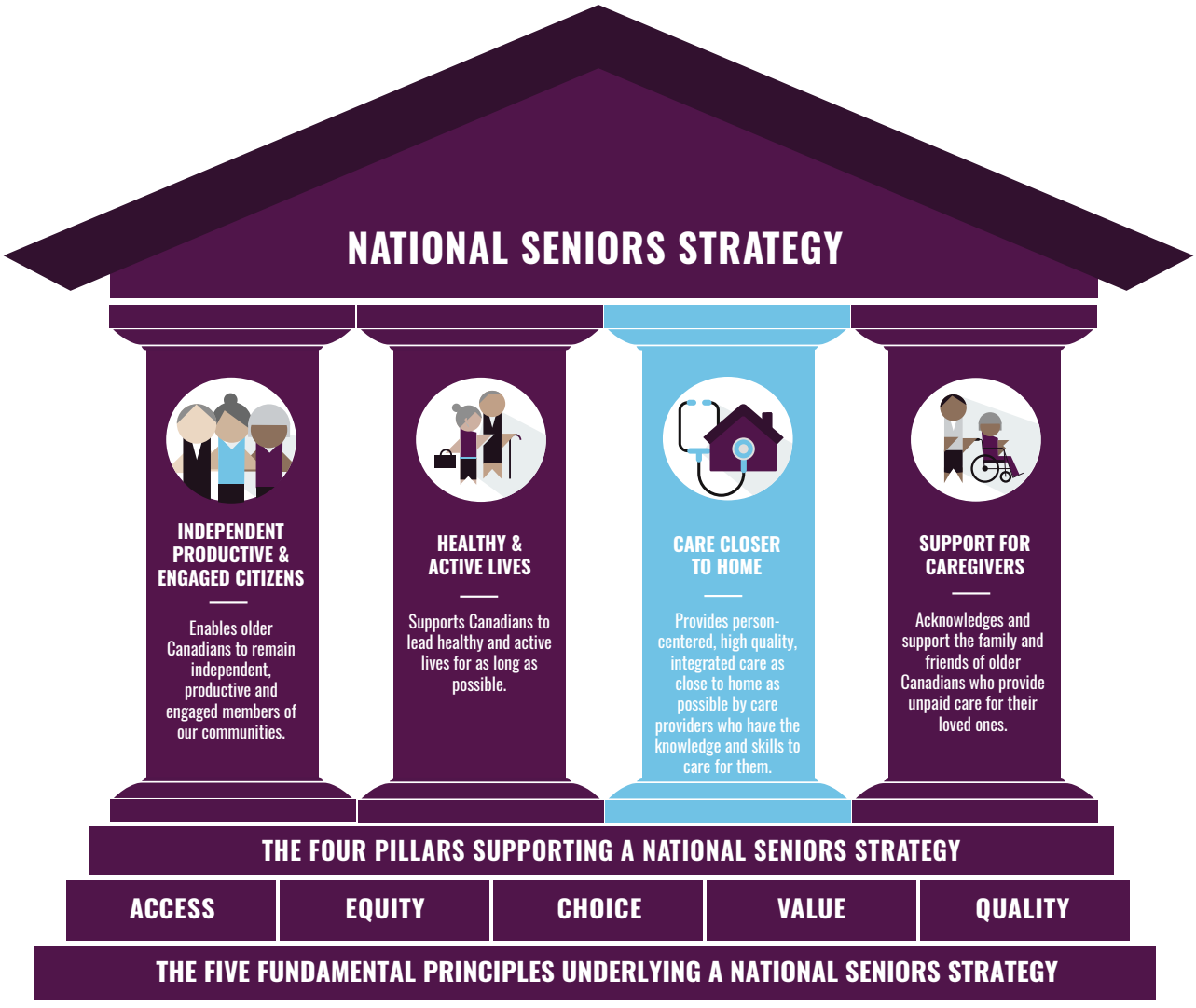
About the National Institute on Ageing

The National Institute on Ageing (NIA) is a public policy and research centre based at Ryerson University in Toronto. The NIA is dedicated to enhancing successful ageing across the life course. It is unique in its mandate to consider ageing issues from a broad range of perspectives, including those of financial, physical, psychological, and social well-being.

The NIA is focused on leading cross-disciplinary, evidence-based, and actionable research to provide a blueprint for better public policy and practices needed to address the multiple challenges and opportunities presented by Canada's ageing population. The NIA is committed to providing national leadership and public education to productively and collaboratively work with all levels of government, private and public sector partners, academic institutions, ageing-related organizations, and Canadians.

About the NIA's National Seniors Strategy

The NIA further serves as the academic home for the National Seniors Strategy (NSS), an evolving evidence-based policy document co-authored by a group of leading researchers, policy experts and stakeholder organizations from across Canada and first published in 2014. The NSS outlines four pillars that guide the NIA's work to advance knowledge and inform policies through evidence-based research around ageing in Canada: Independent, Productive and Engaged Citizens; Healthy and Active Lives; Care Closer to Home; and Support for Caregivers.



Authors and Reviewers

This report was written by:

Dr. Samir Sinha MD, DPhil, FRCPC, AGSF
Director of Geriatrics, Sinai Health and University Health Health Network, Toronto
Director of Health Policy Research, National Institute on Ageing

Chief Michael Nolan CCP(F), MA
Chief, Paramedic Service and Director, Emergency Services, County of Renfrew

We gratefully acknowledge our contributors and reviewers who provided much of the guidance on the content of this report:

Patrick Boily BA, MPIA
Director of Policy
Ontario Community Support Association

Nancy Cooper BSc, MHSA
Director of Quality & Performance
Ontario Long Term Care Association

Dr. Leighton McDonald MBChB, DOH, MBA
President & Chief Executive Officer Closing the Gap Healthcare

Michael Nicin BA, MA, MPP
Executive Director, National Institute on Ageing, Ryerson University

Ivy Wong BA, MPA, M.P.A
Senior Lead, OHT and System Integration
North York Toronto Health Partners

Executive Summary

Advancing a Virtual Long-Term Care @ Home Program Will Advance the Cost-Effective and Sustainable Provision of Long-Term Care in Ontario

The provision of long-term care is at crossroads in Ontario. The current COVID-19 pandemic has brought to light not only some of the system's pre-existing systemic vulnerabilities, but has also exacerbated its capability to serve more people in need of long-term care services. Indeed, Ontario's current long-term care system is faced with unprecedented capacity pressures that are creating additional strain on the province's health care system as a whole. Ontario also lacks capacity to meet its current demands for home and community care alongside residential long-term care services. Additionally, the province is experiencing a rapidly growing and ageing population with increasingly complex and diverse long-term care needs that will only result in greater demand for these services over time.

The current and previous governments in Ontario have struggled to build more Long-Term Care (LTC) homes. Building and maintaining more LTC beds is an expensive proposition. Additionally, the need to find more frontline staff will be difficult given that recruitment and retention of staff has already been one of the sector's greatest ongoing challenges.

The prior government's inaugural Seniors Strategy in 2012 changed its overall approach to the provision of Long-Term Care, recognizing the overwhelming preference of Ontarians to age in their homes and communities for as long as possible. This led to significant increases in Home Care funding that allowed it to increase its LTC home equivalent clients 75 years of age and older from 60,000 to over 90,000 each year, while continuing to serve approximately 78,000 LTC home residents 75 years of age and older each year in these settings. Despite this accomplishment of enabling more older Ontarians to age-in-place, the rising demand for home and community care still left many Ontarians and their families reporting that they had unmet home care needs and increased family caregiver distress. Meanwhile, LTC home waitlists continued to climb by over 13,000 individuals from 19,615 individuals in 2011-12 to 32,773 individuals in 2017-18. While the current government has continued to increase its home care budgets, it has been doing so at a much lower rate and seen a subsequent further

increase in its LTC home waitlists by 6,000 individuals in less than 2 years – climbing to over 38,000 individuals in 2019-20.

The Canadian Institutes of Health Information (CIHI) recently noted that 1 in 12 (8%) individuals being admitted to Ontario's LTC homes could likely have remained in the community with existing home care and community supports. While many individuals note that the current provision of home care and community supports remains fragmented, inflexible and not well integrated with the local provision of primary care and community paramedicine services, this concept paper proposes an opportunity to provide a new cost-effective alternative model of LTC in Ontario that could:

1. Let more people stay at home for longer
2. Better address the currently growing LTC home waitlists and
3. Save considerable costs and create a more sustainable LTC system for Ontario.

This paper proposes that the Government of Ontario's Ministries of Health and Long-Term Care collaborate to enable the creation of a ***Virtual Long-Term Care @ Home Program***. This program would allow emerging Ontario Health Teams and other health care organizations and providers to voluntarily come together to identify individuals currently eligible for LTC and on existing LTC waitlists. Furthermore, they would be given access to a dedicated amount of predictable funding that they can use flexibly to provide the right mix and types of care involving local primary care, home care, community paramedicine and community support services providers to enable individuals at high-risk of needing to enter a LTC home the opportunity to now preferentially stay at home longer and perhaps never need a LTC home.

Currently, over 30,000 LTC beds in over 300 homes across Ontario require redevelopment. In 2018, the current government pledged to build 30,000 new LTC beds within the next ten years, and 15,000 new LTC beds within the next five years. Furthermore, $1.75 Billion was committed in the 2019 Budget to build 15,000 new LTC beds and redevelop 15,000 existing LTC beds over five years. More recently, in July 2020 the government revised its 2019 pledge to one which would build 8,000 new LTC beds and redevelop 12,000 existing LTC beds over five years for $1.75 Billion. All told the projected cost of building 30,000 new LTC beds and redeveloping 30,000 existing LTC beds will likely cost Ontario's Ministry of Long Term Care between $12.74 – 16.1 Billion (in 2020 dollars) in related capital infrastructure costs to accomplish these goals. This does not include the additional operational costs needed to care for Ontarians in the additionally planned 30,000 LTC beds.

Futhermore, with respect to operational costs, the Ontario Government's recent announcement that it will move towards providing at least 4 hours of direct care per resident per day by 2024-25 from its current level of 2 hours and 45 minutes will likely add another $1.52 Billion (in 2020 dollars) in increased staffing in order to meet the new standard across the 79,000 LTC beds in current operation across Ontario's 626 LTC homes.

This concept paper presents an opportunity through which the Government of Ontario could more cost-effectively care for and support people eligible for a LTC home bed through a Virtual Long-Term Care @ Home program. A Virtual Long-Term Care @ Home Program would promote shorter lengths of stays in LTC homes, thereby optimizing the utilization of current LTC home beds for the people who need them most, and reducing current and future pressures on the system as a whole. This paper argues that implementing such a model of care would provide the Ontario Government with an opportunity to improve care to vulnerable Ontarians, while reducing its overall health care costs and future capital infrastructure costs.

Indeed, this concept paper's proposed ***Virtual Long Term Care @ Home Program*** for LTC home eligible clients in Ontario could save Ontario's Ministry of Long-Term Care significant construction and development related costs of between **$212,259** and **$268,369** for every LTC bed it may no longer need to build or redevelop to better meet the needs of its ageing population to age-in-place. By providing individuals and their families with a more flexible alternative model of home and community care that could allow them to receive the care they need to remain in their own homes for longer rather than in a LTC home, the overall cost savings that such an approach could achieve could be significant.

> "All told the projected cost of building 30,000 new LTC beds and redeveloping 30,000 existing LTC beds will likely cost Ontario's Ministry of Long Term Care between $12.74 – 16.1 Billion"

A Cost-Effective Model

A **Virtual Long Term Care @ Home Model** for LTC home eligible clients in Ontario could save Ontario's Ministry of Long-Term Care significant construction and development related costs of between **$212,259** and **$268,369** for every LTC bed it may no longer need to build or redevelop while allowing it to better meet the needs of its ageing population to age-in-place.

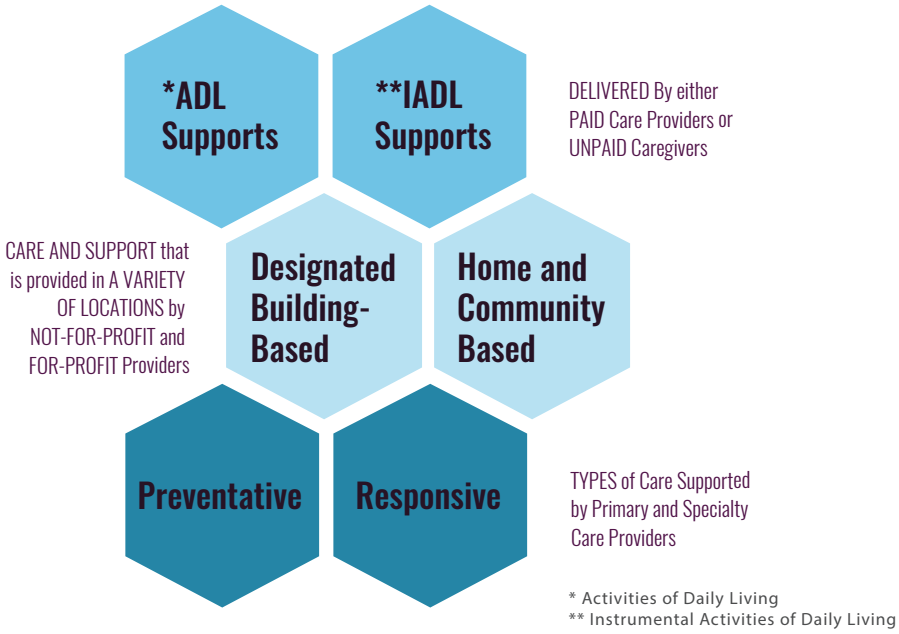
The Virtual Long Term Care @ Home Program being proposed in this paper is fully aligned with Ontario's Seniors Strategy core underlying principles of access, equity, value, quality, and choice. This paper further argues that while this proposed model is not designed to eliminate the need for additional LTC homes and beds, which undoubtedly will be needed across Ontario in the coming decades, it could greatly diminish Ontario's future need for care in institutional settings especially when 78% of Ontarians recently surveyed said that if they had a preference, they would rather receive care in their own homes rather than in a LTC home setting.

"78% of Ontarians recently surveyed said that if they had a preference, they would rather receive care in their own homes rather than in a LTC home setting."

Background and Current State

The provision of *long-term care* is at crossroads in Ontario. The current COVID-19 pandemic has not only brought to light some of the system's pre-existing systemic vulnerabilities, but also has exacerbated its capacity challenges in serving more people in need of long-term care services (See Figure 1 for the NIA's Definition of *Long-Term Care* (LTC)[1]).

Figure 1: NIA Visual of the Components Inherent to the International Provision of Long-Term Care (LTC)[1]



Defining *Long-Term Care*

The NIA defines *long-term care* as[1]: A range of preventative and responsive care and supports, primarily for older adults, that may include assistance with Activities of Daily (ADLs) and Instrumental Activities of Daily Living (IADLs) provided by either not-for-profit and for-profit providers, or unpaid caregivers in settings that are not location specific and thus include designated buildings or in home and community-based settings.

Note: To clearly indicate when the NIA's definition of *long-term care* is being referred to throughout this report, we have presented it in italics.

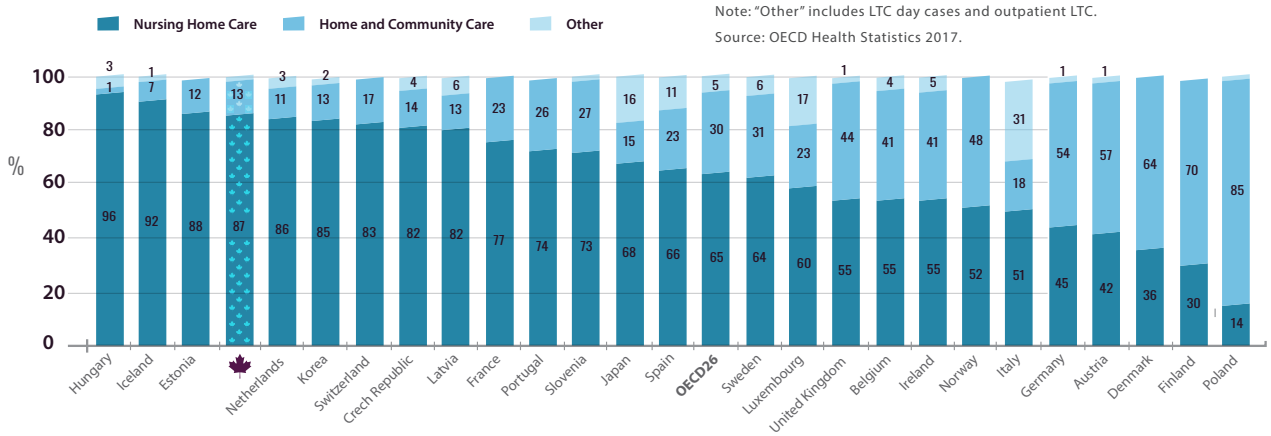
Ontario's current *long-term care* system is faced with unprecedented capacity pressures that is creating additional strain on the province's health care system as a whole.[2] Ontario currently lacks the existing capacity to meet its current demands for home and community care as well as residential *long-term care* services. Additionally, the province is experiencing a rapidly growing and ageing population with increasingly complex and diverse *long-term care* needs that will only create greater demand for these services over time.[2]

Canada currently spends 30% less of its GDP on the provision of publicly-funded *long-term care* (home, community, and residential care services) when compared with other OECD countries.[3] Furthermore, while OECD countries spend on average 65% of their *long-term care* spending on care in institutional settings like LTC homes and 35% on home and community-based care, across Canada, 87% of its public investment in *long-term care* goes to LTC home-based care versus only 13% on home and community-based care as is shown in Figure 2.[3]

Ontario, however, stands out as the Canadian jurisdiction that has most deliberately worked towards significantly narrowing its ratio of spending in favour of LTC home-based *long-term care* over home and community-based care.

In 2012, Ontario developed Canada's first comprehensive provincial Seniors Strategy[4] that emphasized the importance of both expanding its overall *long-term care* investments and particularly in accelerating the growth of its home and community care sector. In 2012, the Government of Ontario began a deliberate policy of increasing its spending on community programs

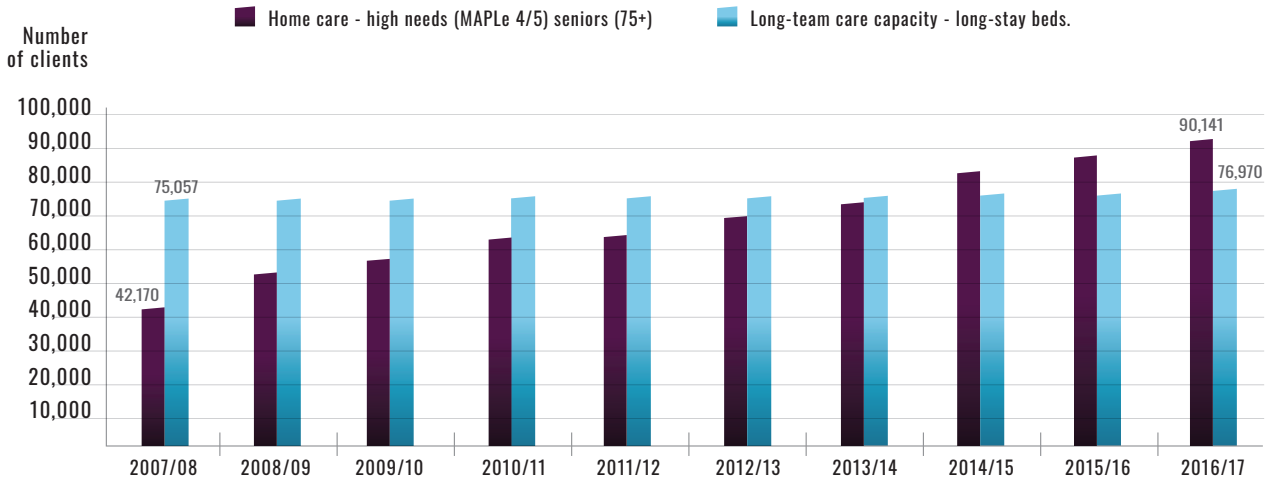
Figure 2: Government and Compulsory Insurance Spending on LTC (health) by Mode of Provision, 2015 (or nearest year) Across OECD Nations[3]



that included home and community care, community support services and community mental health programs. In particular, it increased its spending on home and community care by at least 5% annually, compared to growing its LTC home expenditures at approximately 2% annually. This deliberate policy to increase its spending on home and community care allowed it to almost double what it spent on home and community care and community support services as a proportion of its overall health expenditures over time. As a result, spending on home care and community support services grew from $2.76 billion (5.5% of total health spending in 2011-12)[5] to $4.2 billion (6.6% of total health spending in 2019-20).[6] In comparison, the Ontario government oversaw a more muted growth in its spending on LTC home care as a proportion of its overall health care budget, growing from $3.7 billion (7.4%) in 2011-12[5] to $4.4 billion (7%) in 2019-20[6] – and the addition of only 645 net new LTC home beds over this time period as well.

Between 2011-12 and 2016-17, the number of LTC home beds serving high-needs Ontarians 75 years of age and older has remained steady at approximately 76,000. At the same time, the number of high-needs Ontarians 75 years of age and older who received intensive care at home rather than in a LTC home more than doubled, from approximately 60,000 to 90,141 during the same period as is illustrated in Figure 3.[7]

Figure 3: High-Needs Older Ontarians (75+) Cared for with In-Home Care versus existing LTC Capacity between 2007-08 to 2016-17[7]



*The number of LTC long-stay beds shown are for april of every FY shown, from monthly LTCH System Reports

Despite this accomplishment of enabling more older Ontarians to age-in-place, the rising demand for home and community care still left many Ontarians and their families reporting that they had unmet home care needs and increased family caregiver distress. Meanwhile, LTC home waitlists only continued to climb by over 13,000 individuals from 19,615 individuals in 2011-12 and 32,773 individuals in 2017-18.[8]

The 2018 election brought a renewed interest in building more LTC home beds across Ontario. All three major political parties in Ontario pledged to build 30,000 new LTC beds within the coming decade to address the growing LTC home wait list that by then stood at nearly 33,000[8] individuals.[9] At the same time, close to 15% of acute care hospitals beds in Ontario housed thousands of Ontarians waiting to go back home with home and community care or to a LTC home.

Ontario's current government was elected with a mandate to end hallway medicine across Ontario's hospitals and to build 30,000 new beds over the coming decade. To meet this latter pledge, in 2019, the Ontario Government committed $1.75B to build 15,000 new LTC beds and redevelop 15,000 existing LTC beds over five years.[2,10] Ontario also created a stand-alone Ministry of Long-Term Care (MLTC) in 2019 to further support the creation of a 21st century long-term care sector that could provide high quality care and accommodation to meet the clinical, safety, and social needs of Ontarians living in its LTC homes.[2] Since 2018, only 34 new beds have been opened. By 2020, prior to the onset of the COVID-19 pandemic, the provincial wait list for one of the province's approximately 79,000 licensed LTC beds had climbed to a record 38,000 individuals.[11] Furthermore, current licenses for approximately 26,531 beds across 257 LTC homes will expire on June 30, 2025.[12] More recently, in July 2020 the government revised its 2019 pledge downwards to one in which it would build 8,000 new LTC beds and redevelop 12,000 existing LTC beds over five years for $1.75 Billion.[2,10,11]

While the current government has continued to increase its home care budgets, it has been doing so at a much lower rate and there has been seen a subsequent further increase in its LTC home waitlists by 6,000 individuals in less than 2 years – climbing to over 38,000 individuals in 2019-20 before the onset of the current COVID-19 pandemic.

Infectious disease outbreaks in LTC and retirement home settings are not a novel phenomenon. In fact, between 2014 and 2019, outbreaks of influenza and other common respiratory infections have been relatively common in these settings.[13] LTC homes have been found to experience at least 3 times the rate of outbreaks

compared to retirement homes and 7 times the rate of outbreaks in Ontario hospitals.[13] The vast differences seen by accommodation type have largely been attributed to the fact that nearly all of the accommodations in private-pay retirement home settings are in single-bedded rooms, while in Ontario LTC homes two and four-bedded room configurations remain common, especially amongst older LTC homes.[13]

The COVID-19 Pandemic, which has as of November 12, 2020 led to 1,650 LTC and Retirement home outbreaks, representing 28% of homes across Canada, and 8,157 resident and 16 staff deaths has further shaken the confidence of many Canadian in the existing LTC system.[14]
Ontario's 626 LTC and 770 Retirement Homes were particularly negatively impacted with 43% or 599 LTC and Retirement Homes having reported outbreaks to date resulting in 8,514 resident cases and 2,319 resident deaths and 4,647 staff cases and 8 staff deaths.[14]

Ontario's first wave of COVID-19 infections saw the vast majority the province's deaths take place in approximately half of its LTC home settings from March through June 2020. Furthermore, approximately 50% of Ontario's first wave LTC deaths occurred in just over two dozen mostly older homes. Ontario's current second wave, with significantly higher that previously seen levels of community transmission, is now seeing once again many of its LTC Homes struggle with new COVID-19 outbreaks and dozens of new deaths once again. While these settings have entered the second wave much better prepared than they were for the first wave, the mounting number of homes that are once again restricting access to visitors and family caregivers is creating renewed concerns about how this will once again further negatively impact the health and well-being of LTC home residents.

Similarly, having more than two occupants to a room has been found to significantly increase the risk of dying from COVID-19 in a LTC home, especially in its older homes that have upwards of four residents sharing a room.[15]

At the beginning of the pandemic, 20,281 (25.8%) of Ontario's 78,607 LTC home residents were living in 5,070 4-bed rooms across Ontario.[15] If all existing 4-bed rooms were converted to 2-bed rooms, an additional 5,070 new 2-bed rooms would be required to maintain current LTC home capacity across Ontario.[15] Furthermore, if all multiple-occupancy rooms were converted to single-occupancy rooms, an additional 29,871 new single-occupancy rooms would be required to maintain current LTC home capacity across Ontario.[15] If these conversions had been made prior to the pandemic, it has

been estimated that between 263 and 437 deaths could have been prevented during the first wave of the COVID-19 pandemic.[15]

To address the clear risk of crowding, the Ontario Government has limited the admission of LTC home residents into multi-bedded rooms to a maximum of two individuals, although compliance with this directive has been found to be variable to date.[16]

In light of what has happened across nursing and retirement home settings during the pandemic, public sentiment around the provision of long-term care has shifted significantly.

Indeed, a National Institute on Ageing/ TELUS Health Survey[17] of 1,517 Canadian conducted in late July 2020 revealed that:

- Almost **100%** of Canadians 65 years of age and older reported that they now planned on supporting themselves or their loved ones to live safely and independently in their own home as long as possible.
- Approximately **60%** of all Canadians - and almost **70%** of Canadians 65 years of age and older - further reported that COVID-19 had changed their opinion on whether or not they'd arrange for themselves or an older loved one to live in a LTC or retirement home.
- While **28%** of Canadians reported already having taken on unpaid caregiving responsibilities for an ageing parent or loved one, only **43%** said that, if needed, they were personally and financially prepared to become a caregiver for an ageing family member.

An earlier survey of 1,001 Ontarians conducted in June 2020[18], revealed similar findings. Asking questions about Ontarians' perceptions of the long-term care system, the results showed that:

- **97%** of Ontarians believed there was a crisis in long-term care during the first wave.
- When asked to rate on a scale of 10 their comfort level in the state of Ontario's long-term care homes, respondents rated it a **4**.
- **57%** of Ontarians did not believe they'll have access to good quality long-term care when they needed it.
- **78%** of Ontarians further said they would prefer to receive homecare for themselves and their loved ones over care in an LTC home.

In response to growing desire of Ontarians to live safely and independently in their own home as long as possible, the Ontario Government recently proposed the creation of

a temporary home improvement tax credit for older Ontarians during the 2021 taxation year in its 2020 Budget.[19] Its Seniors Home Safety Tax Credit was designed to help older Ontarians, and intergenerational families who have older persons living with them, to make their homes safer and more accessible.[19] Older persons would be eligible for the credit regardless of their income and whether or not they owe income tax for 2021. The $10,000 maximum in eligible expenses would apply per principal residence and could be shared among family members, including spouses, who live with the older persons. The maximum credit would be worth $2,500 or 25% of up to $10,000 in eligible expenses which must relate to renovations that improve safety and accessibility or help an older person be more functional or mobile at home. Currently the government estimates that this new tax credit would benefit about 27,000 people and cost about $30 million.[19]

It should be noted that public concerns around the provision of long-term care are longstanding. Indeed, a 2017 Survey conducted by Nanos Research on behalf of the Ontario Long-Term Care Association[20] found that:

- **More than half** of Ontarians surveyed were somewhat not confident or not confident at all that the provincial government was investing enough into long-term care to ensure LTC homes were continually providing quality care.
- Almost **two-thirds** of Ontarians surveyed disagreed or somewhat disagreed that they were confident in LTC homes being able to handle the care needs of Ontario's ageing population.
- More than **90%** of Ontarians surveyed said that it was unacceptable or somewhat unacceptable that older LTC homes were currently not designed to safely meet the needs of older persons living with Alzheimer's or dementia.
- More than **90%** of Ontarians surveyed said that it was unacceptable or somewhat unacceptable that more than three older persons could share a room.

Recruiting and retaining adequate staff has been identified as a significant ongoing challenge for the vast majority of Ontario LTC homes prior to the pandemic. In a 2018 survey of Ontario's LTC homes, 80% of respondents said they had difficulty filling shifts, and 90% experienced challenges recruiting staff. Additionally, homes reported working short, working staff into overtime, and sometimes being unable to fill the required shifts to provide care that residents needed.[21]

Furthermore, existing staffing levels have been deemed inadequate. The Ontario Government's own recent LTC Staffing Study Advisory Group[22] recommended that the province increase its staffing levels to ensure that all residents receive at least 4 hours of personal care every day, over the current 2 hours and 45 minutes being currently provided by nurses and personal support workers (PSWs). Recently its LTC COVID-19 Commission recommended that this recommendation be implemented. As a result, the Ontario Government recently announced that it will move towards providing at least 4 hours of direct care per resident per day by 2024-25 from its current level of 2 hours and 45 minutes.[23] It has been estimated that this will likely further add at least $1.52 Billion (in 2020 dollars) to hire more staff and/or increase current hours of work for existing staff in order to meet the new standard.[24] This would be in addition the current $4.6B (in 2020 dollars) of operational dollars being spent annually to provide long-term care services to over 100,000 Ontarians across 626 homes with 79,000 beds in place prior to the current pandemic.[25]

Many Ontarians receiving care in LTC homes continue to do so in older crowded homes in need of redevelopment. Currently, more than 30,000 of Ontario's 79,000 beds – representing just under half of its LTC homes - have been classified as needing redevelopment. The current and previous Ontario governments made several attempts to encourage long-term care operators to redevelop older crowded homes in need of redevelopment. As noted earlier, in July 2018, the current government committed $1.75B towards creating 15,000 new LTC home beds and redeveloping 15,000 existing, older LTC home beds to modern design standards.[10,26]

More recently, in July 2020 the government re-committed to investing $1.75B, but redirected this amount towards the goal of creating 8,000 new LTC home beds and redeveloping 12,000 existing, older LTC home beds to modern design standards.[11,27] Accompanying this announcement were significant increases and other changes made to Construction Funding Subsidies and the ability of homes to receive new Development Grants at the beginning of projects to cover upfront costs like development charges, land, and other construction expenses – albeit to further incentivize and speed up the development and re-development process of fewer new and redeveloped beds.[11,27] While the goal is to get much of this work under way within the next few years, it remains uncertain how many of the government's new goals will be met within its current mandate to help meet the immediate hallway healthcare pressures, especially when existing LTC home bed capacity and occupancy rates have been deliberately

reduced during the pandemic in a bid to limit crowding in older LTC homes. Collectively, staffing and accommodation issues clearly underlined some of Ontario's longstanding and core systemic vulnerabilities that led to some of the province's biggest and deadliest outbreaks during its first wave of the COVID-19 pandemic. The Ontario Government has helped to better prepare its LTC homes as they endure a much larger second wave of COVID-19 cases and unprecedented levels of community transmission that have once again led to a growing number of new outbreaks and deaths in its LTC settings. Nevertheless, there are renewed and escalating calls to re-think the way long-term care has been provided in Ontario. Once again, these focus on the provision of more long-term care services via home and community care settings, as opposed to in LTC homes.

Who Are Our Current LTC Home Residents in Ontario

Since 2010, only people with high or very high care needs, as determined with a standardized assessment, are eligible to apply for a LTC home bed in Ontario. These changes were brought about largely due to the province's then Aging-in-Place Strategy, which also began to make more funding available for Ontarians to receive care at home. These measured were coupled with the implementation of new, stricter admission criteria for those entering LTC homes. As a result, Ontarians entering its LTC homes are now older, frailer, and in need of more medical and personal care.

Currently, in Ontario a typical LTC home resident is **84** years old and has a remaining life expectancy of around **2.5** years.

- **90%** are living with some form of cognitive impairment;
- **86%** of residents need extensive help with daily activities such as getting out of bed, eating, or toileting;
- **79%** experience bladder incontinence;
- **46%** exhibit some level of aggressive behavior related to their cognitive impairment or mental health condition;
- **40%** need monitoring for acute medical conditions.[28]

What Characterizes Current LTC Home Demand in Ontario

Ontario LTC homes typically operate at a 98-99% occupancy level.[29] In a typical year, LTC homes accommodate over 100,000 residents across its 79,000 beds, as approximately 22,000 LTC home residents die every year.[29] A small minority of individuals access short-stay services such as respite care being offered in LTC homes.[29] Typically, 98% of Ontario LTC home residents are long-stay residents.[29]

Prior to the onset of the pandemic, over 38,000 people in Ontario were on the wait list for LTC homes. At that time, the median time to placement (or wait time) on was 152 days or almost half a year.[8] In some cases, the wait for a safe place to call home is even longer than 6 months and can be as long as many years for a particular home.[8] The wait time for a LTC home bed placement is a significant contributor to the problem of hallway health care in Ontario. Approximately 24% of LTC residents are placed from hospitals.[8] In 2018-19, the median time to placement (or wait time) for a LTC bed for residents from hospitals with an Alternate Level of Care (ALC) designation was 98 days.[8] The average wait for LTC home placement for people waiting in a hospital with an Alternate Level of Care (ALC) designation was 94 days.[8]

Furthermore, due to long LTC wait times, these patients tended to represent one-third of the alternate level of care (ALC) days in Ontario.[8]

In a 2020 report, CIHI noted that 1 in 12 (8%) of newly admitted LTC home residents in Ontario could instead have likely been cared for at home with the right supports in place.[30] CIHI further found that older persons living in rural areas were 50% more likely than urban dwellers to be admitted to LTC homes when they could instead have likely been cared for at home.[30]

With reasonable flow – short waitlists can help to maintain system efficiency with near complete occupancy of available beds. Nevertheless, the health and social needs of the growing numbers of persons on LTC home waitlists are constantly in flux which can make waiting for placement in a LTC home particularly challenging especially if their care needs rapidly increase as they wait. Unmet demand for timely access to LTC homes, coupled with inadequacies in the delivery or availability of home and community care and support services, creates added pressures in hospitals, contributes to hallway healthcare, increases 9-1-1 calls

for paramedic assistance, and leaves many Ontarians and their families feeling unsupported with their needs for day-to-day care and support. These Ontarians can likely be served better with timely, coordinated care planning that is flexible, responsive and local. Such support could help to avoid emergency department (ED) visits, hospitalizations, and crisis placements into LTC homes.

As noted earlier, many Ontarians eligible for care in a LTC home express a preference to stay in their own homes, with supports from their family and broader community. This would require reliable, more flexible, and responsive care and support that better meet their day-to-day care and support needs. However, current waitlist management strategies are not designed to be flexible enough to allow individuals on a LTC home waitlist to possibly delay their entry into a home, if they are willing to wait longer in the community – i.e., defer an LTC home admission. Until recently, if an LTC home bed became available, individuals would only be given a few days to either accept the placement, or be removed from the waitlist altogether.

Only on March 24, 2020 did the Ministry of Long-Term Care (MLTC) allow individuals to decline a bed offer and not lose their overall position on the waitlist, owing to the circumstances of the COVID-19 Pandemic.[31] This new regulatory change's greater flexibility has supported the system's improved capacity to more quickly accommodate those who need and want an LTC home placement. Furthermore, an accompanying regulatory change allowed for a more flexible discharge and re-admissions process, ensuring residents who choose to leave their LTC home during the COVID-19 pandemic will be prioritized for re-admission to the same LTC home, giving them and their families greater peace of mind should they need to return to their LTC home during or after the pandemic. Creating a permanent set of policy options for individuals beyond the pandemic on admissions, discharge, and readmission, could further encourage individuals and their families to choose a LTC home alternative models of care. It could also enable people to further defer, or even avoid, LTC home placements, thereby improving system capacity, waitlists and flow.

In the fall of 2019, to help older adults remain at home for longer while receiving a high level of care and further reduce strain on hospitals, the Ministry of Health (MOH) invested an additional $155 million for the provision of more home and community care services.[32]

More recently, in September 2020, the MOH announced that it would endeavor to move up to 850 ALC patients from hospitals into more appropriate home and community settings, as well as invest $100 million to deliver more home care supports to Ontarians[33] on top of the $120 million additional home and community funding it announced in March 2020.[34] Despite this, the past two years have seen the highest reported ALC rates and LTC home wait lists ever reported in Ontario. By assisting LTC home eligible older Ontarians to remain at home longer, with improved home and community-based care options, the government could help to further encourage individuals and their families to defer or even avoid unwanted LTC home placements, further improving system capacity and flow. This would especially be the case as future residents may enter Ontario LTC homes for shorter overall lengths of stay, albeit with more complex care needs. To accomplish this goal, however, LTC homes would need to be better resourced to adequately care for residents with shorter stays but with more intensive care needs.

Meanwhile, better coordinated and enhanced home and community-based care and supports, with 24/7 monitoring and point of care support, could more effectively meet the care needs and wishes of most Ontarians otherwise on current LTC home wait lists. It would allow them to remain at home for longer and with loved ones, rather than move prematurely into an LTC home.

This concept paper presents an opportunity through which the Government of Ontario could more effectively care for and support people eligible for LTC homes through a ***Virtual Long-Term Care @ Home Program***. A Virtual LTC @ Home Program would promote shorter lengths of stays in LTC homes, thereby optimizing the utilization of the province's existing LTC home beds for the people who need them most while reducing current and future pressures on the system as a whole. This paper argues that implementing such a model of care would provide the government an opportunity to improve care to vulnerable Ontarians, while reducing its overall health care costs and future capital infrastructure costs.

Understanding the Costs Associated with Providing Care in Ontario LTC Homes

In 2020, the Ministry of Long-Term Care (MLTC) established its minimum costs for providing LTC home care at $67,510 per resident/per year - equal to $184.96 per resident/per day. The MLTC spends approximately an additional $6,000 per resident/per year or $16.43 per resident, per day to cover additional nursing care, specialized supports, and other program initiatives designed to benefit LTC home residents overall in Ontario but may not specifically impact each resident's care equally. (See Appendix A).

The MLTC's $184.96 per resident/per day operating per diem relies on a minimum resident co-payment of $62.18 per day to contribute towards their cost of meals and accommodation depending on the type of accommodation chosen.[25] The LTC sector is required to provide 40% of its accommodations at the basic level in two, three, or even four-bedded rooms that requires the minimum $62.18 per day co-payment. The MLTC notes that it provides 35% of current LTC home residents some level financial subsidy of up to the $62.18 per day co-payment amount to make it financially accessible for any Ontarian in need of care in a LTC home.[25]

Finally, the Ontario Government's recent announcement that it will move towards providing at least 4 hours of direct care per resident/per day by 2024-2025 from its current level of 2 hours and 45 minutes will likely further add at least $1.52 Billion (in 2020 dollars) to hire more staff and/or increase current hours of work for existing staff in order to meet the new standard.[24] If this was fully implemented today, this would add $52.64 per resident/per day to create a $237.60 per resident/per day operating per diem or overall cost of $86,724 per resident/per year.[24]

As a result of the financial subsidies it provides, the overall Government of Ontario's costs for providing LTC home care is closer to $67,510 per resident/per year for at least 1 in 3 LTC home residents (this would rise to $86,724 per resident/per year if the new 4 hours of direct care per resident per day standard is factored in) in addition to the $6,000 per resident/per year ($16.43 per resident/per day) it spends to provide supplementary funding for specialized supports, capital and other initiatives and other program initiatives designed to benefit LTC home residents overall in Ontario but may not specifically impact each resident's care equally.[25]

As of 2018 supplementary costs for providing Long-Term Care in Ontario can include:

- Capital infrastructure costs associated with the development and re-development of LTC homes. Amounts of **$187,336 to $216,993** per new LTC home bed built or redeveloped are being offered to LTC home operators as a **$20.53-$23.78** per resident/per day Construction Funding Subsidy amortized over 25 years. Furthermore, an additional **$24,923 to $51,376** is now being offered as a Development Grant per new LTC bed built or redeveloped from 2018 onwards.[27]

- It should be noted that homes built or redeveloped prior to 2018 are also receiving a previously determined per resident, per day Construction Funding Subsidy amortized over 25 years but no additional Development Grant.[27]

Thus for close to 1/3 Ontarians living in Ontario LTC Homes, the Government of Ontario's associated costs for providing their care is equivalent to $73,510 per resident/per year or $201.39 per resident, per day (this would rise to $92,720 per resident/per year or $254.03 per resident/per day if the new 4 hours of direct care per resident/per day standard is factored in).

In 2016-17, the Ministry of Health (MOH) supported 667,000 Ontarians with home care services.

The MOH notes that near one quarter (22%) of Ontarians aged 75-84, and nearly half (45%) of those aged 90 and over, are receiving home care – with personal support services provided by PSWs and nurses.[35] This accounts to 43% and 26% of home care spending respectively.[35] An additional 712,000 clients were being supported with community support services such as transportation, meals, adult day programs and caregiver supports.[35] The MOH noted that 66% ($1.67B) of its $2.7B in home and community care spending in 2016-17 went to support 269,000 long-stay clients representing 40% of all government-funded home care clients that year.[35] It further noted that in 2016-17, 124,500 of these clients had the equivalent needs of LTC home residents.[35] Spending to support this specific group of individuals to remain at home was determined to be $921M, compared to $5.7B spent that year to provide LTC home care to approximately 100,000 Ontarians.[35]

Current demands for MOH funded home and community care, however, continue to outstrip supply. In 2018-19 the MOH noted that to maintain its current ratio of supporting 76% of Ontarians 75 years of age and older who require LTC home equivalent services at home vs in a LTC home, the current home care system would need to accommodate an additional 23,963 clients. Furthermore,

if it was to try to support 80% of older Ontarians 75 years and older who require LTC home equivalent services at home vs in a LTC home, with home care services it would need to accommodate an additional 40,679 clients.[35]

In 2020, the MOH estimated its per-diem cost of providing care in various settings to individuals with complex needs. Home care was estimated to cost $103 per day for an LTC home equivalent home care client, compared to $201 per day to support a person in a LTC home or $730 per day to support an ALC patient in hospital.[35] In 2017-18, there were approximately 6,300 hospital patients designated as ALC that spent time waiting for an LTC placement.[8] Those patients occupied over 340,000 hospital bed days or about 5% of all hospital bed days in Ontario.[8] Each day a person remains in hospital designated as an ALC patient while waiting for an LTC bed costs the MOH approximately $500 more, as noted earlier, than if the patient were in a LTC home bed.[8] Therefore, in 2017-18, ALC patients waiting in hospitals for LTC home beds reported cost the MOH approximately $170 million.[8] Furthermore, approximately 11% of ALC hospital patients - and 5% of hospital ALC days – were determined to be attributed to ALC hospital patients with a discharge destination of going back to their own homes with home care.[35]

In other words, the MOH can currently provide care to clients with complex needs at a far lower cost in home and community settings, compared to LTC home or hospital settings. It further notes that home and community care does not require significant capital investments and that further savings can be achieved by leveraging volunteer time in community settings. Evidence from the PACE (Program for All-Inclusive Care for the Elderly) Model in the US (See Appendix B), shows that a *Virtual Long-Term Care @ Home Program* could likely deliver significant cost savings. Indeed, these alternative models achieve their value through the creation of more flexible models of home and community-based care that also specifically limit the need for significant capital investment costs associated with building new or renovating existing LTC homes.

A Policy and Practice Challenge

Recognizing the Government of Ontario's commitment to addressing issues related to LTC home waitlists and pressures associated with gaps in hallway healthcare, four key policy questions need to be resolved.

1. How can the Government of Ontario optimize its LTC home system capacity by better supporting the 38,000 eligible persons waiting at home or in hospitals for their LTC home placement? This includes those who choose to defer an admission offer and remain at home for as long as possible during the COVID-19 pandemic, as well as existing residents and their families who may choose to leave their LTC home and live with their families during the COVID-19 pandemic.

2. How can the Government of Ontario optimize its LTC home system capacity through the creation of a *Virtual Long-Term Care @ Home* integrated home care model? Such a model could provide a cost-effective alternative to long-term care for eligible Ontarians and their families that can possibly delay and even help to avoid a future LTC home admissions by better meeting their care and support needs at home.

3. How can the Government of Ontario leverage its emerging Ontario Health Teams and optimize its existing LTC home, home care, community support services, primary care and community paramedicine provider capacity to better support people eligible for *Virtual LTC @ Home Program* supports in their own homes and communities?

4. How can the Government of Ontario optimize its impact on decreasing the frequency and duration of emergency department (ED) visits and hospital admissions (that may hasten a person's need to enter a LTC home) and Alternate Level of Care (ALC) days by LTC home eligible persons?

What Could an Ontario Virtual Long-Term Care @ Home Program Look Like?

Who Could a Virtual Long-Term Care @ Home Program Ideally Serve?

Individuals on - or eligible to be on - the LTC home waitlist who can safely stay at home for longer and who may be able avoid LTC home care admission if supported effectively.

Persons living at home, or who are waiting in hospital, who have been deemed eligible for a LTC home placement with an interRAI MAPLe[1] Score of 4 or 5 are at significant risk for continued functional decline, loss of independence, and caregiver distress.[36,37] These persons have an increased need for improved care coordination, primary care, and social support, as well as in-home episodic care needs associated with complex chronic disease during the waiting period for placement in a LTC home.[38,39]

CIHI notes that that 1 in 12 (8%) of newly admitted LTC home residents in Ontario could likely have been cared for at home with the right supports in place.[30] With over 100,000 people occupying Ontario's 78,890 beds each year, this could represent 8,000 individuals who may have been able to avoid their LTC home admission in the first place. Once admitted, it is currently difficult to transition back to the community. With 38,000 people currently on the LTC home wait list, there could potentially be 3,040 more individuals on these lists who may not require an admission to a LTC home.

It is widely recognized that more needs to be done to involve clients and their caregivers in the planning and delivery of reliable, continuing, and episodic supports so that they can receive long-term care in their own home. 2018-19 Health Quality Ontario data demonstrated that only 41.6% of clients rated their home care coordination and service provider(s) as excellent.[40] Only 61.6% of clients strongly agreed that they felt involved in developing their home care plan. Sadly, in the latter half of 2017-18 a record 26.5% of clients reported having a primary family or friend caregiver who experienced continued distress, anger or depression compared to 21.3% in 2012-13.[40]

"CIHI notes that that 1 in 12 (8%) of newly admitted LTC home residents in Ontario could likely have been cared for at home with the right supports in place. With over 100,000 people occupying Ontario's 78,890 beds each year, this could represent 8,000 individuals who may have been able to avoid their LTC home admission in the first place. Once admitted, it is currently difficult to transition back to the community. With 38,000 people currently on the LTC home wait list, there could potentially be 3,040 more individuals on these lists who may not require an admission to a LTC home."

Often a lack of access to primary care supports, ongoing health monitoring, and support - or a lack of flexibility or availability of home care and community support services - and caregiver burnout are all factors that often lead to people applying for a place in a LTC home. Currently, across Canada there are over 430,000 Canadians[41] who report having unmet home care needs, which represents approximately 150,000 Ontarians. This may also help to explain why over 38,000 Ontarians are on the current LTC home waitlist.

Yet, according to the MOH in 2016-17, it supported 124,500 LTC home eligible clients of all ages to live at home, and specifically 90,141 clients 75 years of age and older to do the same.[35] Furthermore, the MOH estimated that its associated home care costs to support 124,500 LTC home eligible home care clients to be cared for at home was $921M vs $4.0B to care for approximately 100,000 Ontarians in Ontario's LTC homes in 2016-17.[35] With a large number of Ontarians still reporting that they have unmet home care needs, it is clear that this only puts pressure on people and their families to apply for and enter a LTC home setting prematurely.

Being able to provide a comprehensive community-based option for these high needs individuals and their families could therefore allow for a more cost-effective alternative to LTC homes to be provided in Ontario. This would also better meet the needs of older persons wishing to remain healthy and independent in their communities for as long as possible.

"The MOH estimated that its associated home care costs to support 124,500 LTC home eligible home care clients to be cared for at home was $921M vs $4.0B to care for approximately 100,000 Ontarians in Ontario's LTC homes in 2016-17."

Individuals in hospital designated as Alternate Level of Care (ALC) patients, eligible for - or on - the LTC home waitlist who can safely go home with a more comprehensive long-term care alternative.

When patients have a delayed hospital discharge because they have been medically cleared for discharge, yet remain in hospital because a more appropriate care setting (such as home with home care or LTC home care) is not available, these patients are designated as Alternative Level of Care (ALC) patients. ALC issues are a particularly challenging problem in rural, remote, and smaller urban communities. In these locations, home care and community supports, including the availability of primary care providers, or long-term care alternatives and unpaid caregivers, tend to be in short supply.[42] CIHI's recent report has noted that older persons living in rural areas are 50% more likely than urban dwellers to be admitted to LTC homes when they could have been cared for at home with the right supports in place.[30]

In addition, the lack of PSWs, nurses, therapists and others available to support care needs within an individual's home has also contributed to longer wait times in hospitals. The current ALC situation in Ontario is a serious health care quality issue with negative implications for people (e.g., functional decline) as well as having significant negative impacts on the health care system efficiency (e.g. backups in ED off-load leading to hallway healthcare, inability to flow patients to inpatient beds and disruptions in hospital surgeries and other and procedures). ALC further disproportionately impacts persons living with cognitive impairments[42], which also further compounds the urgent need for better LTC home care supports for people living with dementia.

A report by the Ontario Hospital Association showed that in September 2019 there were 5,372 ALC patients — accounting for 17% of hospital beds—waiting for a different level of care that was not available when needed.[43] The total number of hospital days attributed to ALC patients as of September 2019 was approximately 750,000 days which represented a 25% increase from the almost 600,000 days for all ALC patients in September 2018.[43] A majority of ALC patients are older persons waiting for a place in an LTC home while others were waiting for home care services, supervised or assisted living, rehabilitation, palliative care, mental health services or other services.[43] Some ALC patients wait significantly longer for placement in an appropriate setting due to the nature of their care needs.[43]

According to the MOH, the misplacement of these patients costs Ontario taxpayers approximately $730 per day to house in-hospital ALC patients, in contrast to $103 per day for providing home care to clients with the most complex needs who have the equivalent needs of a LTC home resident, or $201 per day (currently) and potentially $254.03 per day to support a person in a LTC home as the new 4 hour standard or direct care provision comes into effect.[35]

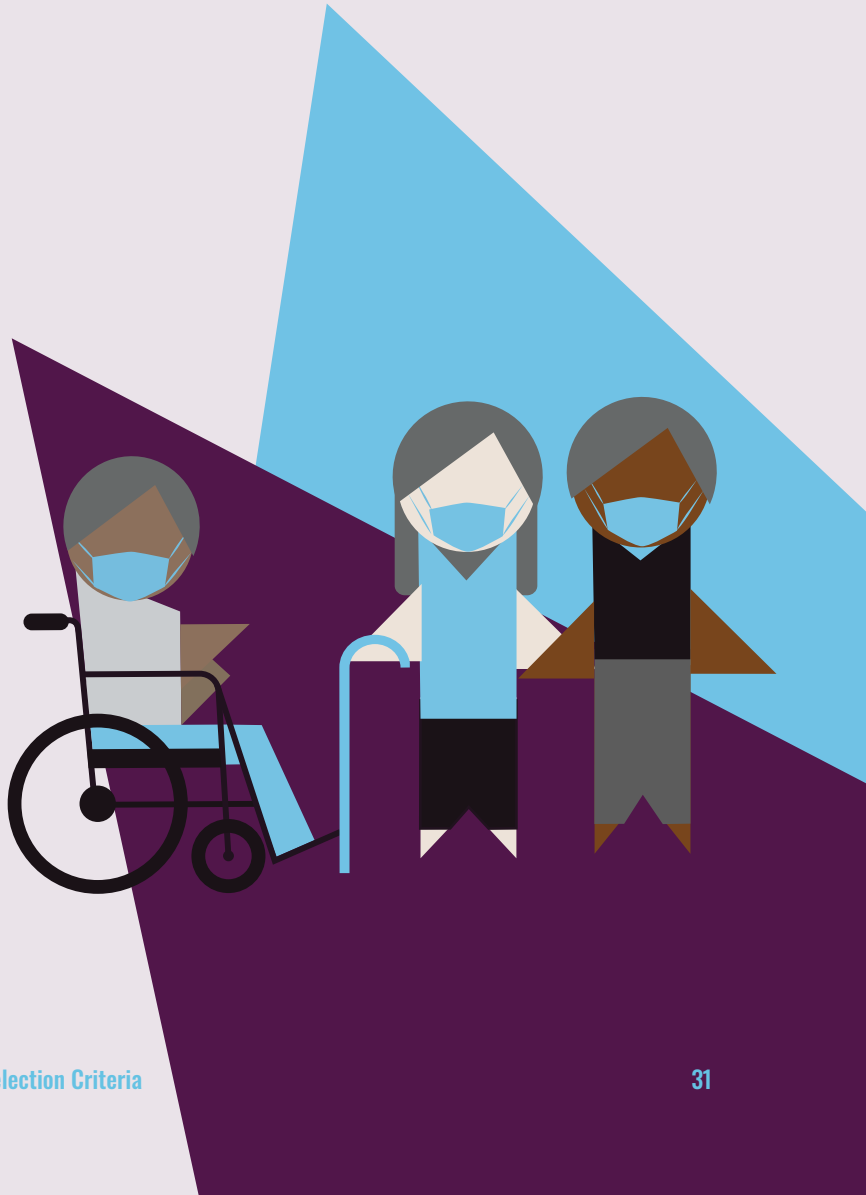
The Ottawa Hospital, for example, reported having 15% of its 1,232 acute beds occupied by ALC patients awaiting home and community care support or a LTC home placement in late 2019.[44] This represents 67,452 ALC bed days per year at its own estimated cost of $730 per bed day or $43M total cost per year at this hospital. ALC patients represents a significant source of backlog of persons needing to be placed with more appropriate care in their own homes or in a LTC home. Consequently, any hospital's ability to efficiently provide acute care services is also impacted when ALC issues exist. ALC patients, through no fault of their own, also negatively impact Ambulance/Paramedic off-load times, time for admitted acute care patients to access inpatient beds, less safe conditions for both patients and staff, as well as cancelled elective surgeries. It also significantly negatively impacts patient experience and results in a higher number of complaints to the Patient Ombudsman.

"According to the Ministry of Health, its costs Ontario taxpayers $730 per day to house in-hospital ALC patients, in contrast to $103 per day for providing home care to clients with the most complex needs who have the equivalent needs of an LTC resident for whom it costs $201 per day to care for them in a LTC home."

Proposed Virtual Long-Term Care @ Home Program Client Selection Criteria

Criteria for inclusion in the Virtual Long-Term Care @ Home program should include:

- Persons eligible for a LTC home placement;
- Persons with a interRAI Home Care (HC), Community Health Assessment (CHA) or Long-Term Care Assessment (LTC) MAPLe Score of 4 or 5;
- Persons with Complex care - multiple comorbidities/chronic conditions;
- Persons living in the community or in hospital with an ALC designation or who are on a LTC home waitlist;
- The ability to safely live in the community at the time of enrollment, with support of this proposed program.



Proposed Virtual Long-Term Care @ Home Program Partners

A local Ontario *Virtual Long-Term Care Program* would be led by an integrated team that would ideally consist of the following partners:

- **Local Community Support Services Agencies** that provide a core basket of services including *Meals on Wheels*, transportation, adult day programs, and friendly visiting services.
- **Home Care** service provider organizations that can provide professional services such as nursing and other allied health supports, such as physiotherapy and occupational therapy, in addition to PSW-led care that is usually needed.
- **Primary Care Providers** that can support patients to have their primary care needs met in clinic-based settings or as is appropriate in their own homes, enhanced where needed with virtual care methods.
- **Community Paramedics** that can offer 24-hour remote patient monitoring capabilities as well as scheduled and non-scheduled home visits that can further enhance the clinical care of these often medically complex individuals.

There are several **Ontario Health Teams (OHTs)** that have been established or are in development across Ontario that have already identified frail older adults as a priority population around which to collaborate. Across the province, several coalitions have brought together large community support services (CSS) and home care providers, primary care organizations such as family health teams and community health centers as well as community paramedicine services who could collectively serve as natural leads for the delivery of a virtual long-term care program. For a *Virtual Long-Term Care @ Home Program* to be successful, it must address the evolving and immediate needs of individuals on - or eligible to be on - the LTC home waitlist. To achieve this, a flexible, nimble and responsive, 24/7 clinical service will be needed to complement a person's standard care.

Ideally, an OHT, which includes primary care, home care, community support services and community paramedicine providers, will form the core elements needed to create a *Virtual Long-Term Care @ Home Program*. OHTs would work to identify appropriate individuals who are eligible for LTC home care and who are on

a waitlist, but who prefer to stay at home for as long as possible. The team would work to create a coordinated care plan and organize and provide the ideal mix of services in line with the *Virtual Long-Term Care @ Home Program* funding they have been allotted. Full funding flexibility should be given to the team so that they in partnership with the client and their family could fund whatever they feel could best enable a *Virtual Long-Term Care @ Home* client to stay at home. This could allow a client to get the best possible care and support (e.g., a personalized mix of home care, community supports, etc.) and the flexibility to purchase supplies and equipment to enable ageing in place. Physician services and prescription medications would be funded under OHIP and the Ontario Drug Benefit (ODB) Programs.

A minimum of weekly huddles would occur with the entire care team to coordinate care, discuss issues, and strategize around solutions. Other attendees that could be part of a client's broader circle of care could be invited to attend these meetings (e.g., a hospital discharge planner).

All clients would be routinely assessed with the same InterRAI Assessment Systems for long-stay home care clients to support care planning, as well as monitoring. All documentation amongst the team would occur using one shared Electronic Health Record (EHR), the LHIN's Home Care Client Health Record Information System (CHRIS) and Paramedic Pre-Hos applications that would be available and accessible to all in the circle of care, including the patient and their caregiver(s).

A *Virtual Long-Term Care @ Home Program* deploying community paramedics can particularly support people eligible for a LTC home placement who may or may not be receiving home and community care services, but who have multiple co-morbidities and modifiable risk factors, such as hypertension, diabetes, congestive heart failure, chronic obstructive heart disease, recurrent pneumonia, early onset dementia etc. By providing a safety net for these individuals who are eligible for LTC home placement, this program will demonstrate that with the added clinical supports of an integrated and responsive community paramedic program, *Virtual Long-Term Care @ Home* program clients can further improve their access to care, quality of life, health stability, client and caregiver satisfaction and provide a more viable alternative to requiring a placement in an LTC home especially in rural and remote communities.

Key elements of the proposed *Virtual Long-Term Care @ Home Program* will leverage the availability and cost effectiveness of local municipally administered community paramedic programs that could provide interventions such as:

- Access to 24/7 remote monitoring of blood pressure, oxygen saturation, blood glucose, weight and temperature alerts, specific to an enrollee's diagnosis so that routine / daily vitals can be monitored, personalized alerts and trending changes can be identified, and responded to without delay;
- This level of support is already being offered across Ontario as Community Paramedicine Remote Patient Monitoring (CPRPM) has demonstrated its ability to achieve a significant reduction in 9-1-1 calls and a downstream positive impact on factors that contribute to 'hallway healthcare,' such as ED visits[45,46];
- 24/7 response care to address urgent, episodic care needs
- Video assessment, advice, and treatment in collaboration with the patient's primary care physician, as needed.
- Advanced assessment (e.g., health checks and medication reconciliation) and treatment during routine home visits and the ability to provide more active responses in collaboration with a client's primary care provider, home and community care providers.
- Point of care testing (e.g., portable laboratory testing, ultrasound, electrocardiography).

LTC home wait list clients with complex health and social issues could particularly benefit from enrolment in a *Virtual Long-Term Care @ Home* program, based upon the success of Ontario's existing community paramedic programs that provide a variety of community-level supports through wellness clinics, home visiting programs and remote-patient monitoring programs in collaboration with primary care providers or a multi-disciplinary primary care teams.

It should also be recognized that when *Virtual Long-Term Care @ Home* clients are no longer able to be supported to remain in their own homes with community-based care – (i.e., they become too complex to be safely cared for in the community) – they should be supported and prioritized for admission to one of the LTC homes they were already listed as waiting for.

LTC homes can also participate in this model by working with a local *Virtual LTC @ Home* program to ensure that the right care is being provided in the right place. This would enable seamless transitions when admissions or discharges are required.

LTC homes, where possible, could also provide a base of support for a local *Virtual LTC @ Home Program* through which adult day programs, Meal on Wheels, and other supports could be provided. This partnership will ensure that care is being provided locally to the most appropriate patients on the waitlist. Additional opportunities exist to optimize the use of adult day programs, respite care, and social and community services. This model also promotes an eventual seamless transition from the community to an LTC home. LTC home providers could further support the implementation of a *Virtual Long-Term Care @ Home Program* by being the lead applicant to MLTC and MOH in administering the allocated funds – in both their "bedded" and "virtual" streams of care.

Hospitals can participate in this model by identifying inpatient ALC-to-LTC patients likely suitable and eligible for discharge to a local *Virtual LTC @ Home* program rather than waiting in hospital to be admitted directly into an LTC home bed.

Such a model could help to bring ALC-to-LTC home patients back home from the hospital. This could potentially allow patients to avoid LTC home placement all together, or for a longer period of time. As noted earlier, this model could also potentially allow some individuals in LTC homes to return to their communities with a more appropriate model of care that meets their needs.

For persons living in an LTC home with complex conditions, this integrated model between LTC homes and other providers creates an opportunity for other novel team-based approaches to care. With the greater support of community paramedics, for example, long-term care providers, medical directors, and their in-home patients can be clinically supported to avoid transferring patients to hospital. Examples of interventions include LTC home residents who require IV treatments, acute care medication administration, pain management, immunization, palliative care, post-fall assessments, and point of care testing (e.g., INRs, influenza or COVID-19 swabs, ultrasound, phlebotomy and electrocardiography).

Ultimately, this proposed *Virtual Long-Term Care @ Home Program* concept is predicated on its care being provided by local primary care, home care, community paramedics and community support services, as available. It is not the intention of this program to duplicate or compete with other existing services, but rather to work within partnerships to find innovative ways to improve patient access and experience, bridge gaps in care, and increase the overall effectiveness, efficiency and care experiences of Ontarians and their families.

Proposed Virtual Long-Term Care @ Home Program Funding Model

An Ontario *Virtual Long-Term Care @ Home Program* that focuses on supporting LTC home eligible patients with alternative home and community care supports could provide organizations willing to sponsor and care for these individuals with the equivalent of **$44,815 per client/per year** or **$122.78 per client/per day** (i.e., *the current LTC home pre resident cost per day MINUS the current LTC home minimum resident daily co-payment*) for their personal care costs per enrollee/per year that would otherwise be funded by the MLTC to care for them in an Ontario LTC home.

Recognizing that 35% of current Ontario LTC home residents receive some level provincial subsidy based on their income levels and that the MLTC ends up providing upwards of **$67,510 per resident/per year** or **$184.96 per resident/per day,** an argument could be made for low-income *Virtual Long-Term Care @ Home Program* clients to also be supported with a higher rate of funding.[25]

While both rates would be more expensive than the current rate of **$37,595 per client/ per year** or **$103 per client/per day** currently attributed to the average home care costs associated with the current provision of government-funded home care for LTC home equivalent clients, this would actually alleviate other additional costs especially being borne by the government to fund the creation of new or redeveloped LTC beds along with the proposed additional operation costs that it would cost to provide up to 4 hours a day of direct care[25]: These supplemental costs associated with providing LTC home care are outlined further:

- Approximately **$6,000 per resident/ per year** or **$16.4 per resident/per day** being currently spent to provide supplementary funding for specialized supports, capital and other initiatives and other program initiatives designed to benefit LTC home residents overall in Ontario but may not specifically impact each resident's care equally.[25] As of 2018 supplementary costs for providing LTC home care in Ontario can include:

- Capital infrastructure costs associated with the development and re-development of LTC homes. Amounts of **$187,336 to $216,993** per new LTC home bed built or redeveloped are

being offered to LTC home operators as a **$20.53-$23.78** per resident/per day *Construction Funding Subsidy* amortized over 25 years. Furthermore, an additional **$24,923 to $51,376** is now being offered as a *Maximum Development Grant* per new LTC bed built or redeveloped from 2018 onwards.[27]

- It should be noted that homes built or redeveloped prior to 2018 are also receiving a previously determined per resident, per day *Construction Funding Subsidy* amortized over 25 years but no additional *Development Grant*.[27]
- Approximately **$19,214 per resident / per year** or **$52.64 per resident, per day** in new costs being proposed to support the Ontario Government's recent announcement that it will move towards providing at least 4 hours of direct care per resident per day by 2024-25 from its current level of 2 hours and 45 minutes will likely further add at least $1.52 Billion (in 2020 dollars) to hire more staff and/or increase current hours of work for existing staff in order to meet the new standard.[24]

Indeed, this concept paper's proposed Virtual Long Term Care @ Home Program for LTC home eligible clients in Ontario could save Ontario's Ministry of Long-Term Care significant construction and development related costs of between $212,259 and $268,369 for every LTC bed it may no longer need to build or redevelop to better meet the needs of its ageing population to age-in-place. Indeed, by providing individuals and their families with a more flexible alternative model of home and community care that could allow them to receive the care they need to remain in their own homes for longer rather than in a LTC home the overall cost savings that such an approach could achieve could be significant.

A Cost-Effective Model

A Virtual Long Term Care @ Home Model for LTC home eligible clients in Ontario could save Ontario's Ministry of Long-Term Care significant construction and development related costs of between **$212,259** and **$268,369** for every LTC bed it may no longer need to build or redevelop while allowing it to better meet the needs of its ageing population to age-in-place.

What Does it Cost to Build a Long-Term Care Bed in Ontario?

Understanding How Advancing a Virtual Long-Term Care @ Home Program Could Save Ontario Billions.

Currently, over 30,000 LTC beds in over 300 homes across Ontario are in need of redevelopment. In 2018, the current government pledged to build 30,000 new LTC beds within the next ten years, and 15,000 new LTC beds within the next five years. Furthermore, $1.75 Billion was committed in the 2019 Budget to build 15,000 new LTC beds and redevelop 15,000 existing LTC beds over five years.[10] More recently, in July 2020 the government's revised 2019 pledge to one in which it would build 8,000 new LTC beds and redevelop 12,000 existing LTC beds over five years for $1.75 Billion.

All told the projected cost of building 30,000 new LTC beds and redeveloping 30,000 existing LTC beds will likely cost Ontario's Ministry of Long Term Care between $12.74 – 16.1 Billion (in 2020 dollars) in related capital infrastructure costs to accomplish these goals.

But is this even possible?

Ensuring that only those who actually need to be in an Ontario LTC home are in one has been the most successful example of enabling more Ageing-in-Place over the past decade. While nursing homes have always cared for residents with a range of support needs, there has been a sharp increase in the proportion of residents with higher needs in recent years.

In 2010, for example, the Ontario government, as part of its Ageing at Home Strategy, began to set stricter criteria for admission to long-term care (Ontario Long Term Care Association, 2019). Now it is highly unlikely in Ontario that a person would be prioritized for a LTC home admission if their interRAI LTC Assessment (**M**ethod for **A**ssigning **P**rioirty **L**evels) MAPLe Score is less than a 4 (High) or 5 (Very High). As a result, current Ontario LTC home residents on admission tend to present with more advanced stages of cognitive and physical impairments, less stable health care needs, and higher overall care needs. Supporting more of these individuals at home can only be enabled when there is more funding made available to allow this to occur.

CIHI has published two recent studies that point to the same insight: there is a substantial proportion of Canada's LTC home population of between 11-30% who do not likely require LTC home level care and could remain in the community with the right supports.[47,30] Furthemore, ageing-in-place remains both the preferred and generally more economical option. As noted earlier in this report, the Ontario Ministry of Health estimated that the per diem cost of caring for an older home care client with complex needs equivalent to that of an LTC home resident in the community is $103 per day or half the cost of doing so in a LTC home at $201.39 per day. In Ontario, currently 51% of its long-term care funding is spent on providing care to Ontarians in LTC homes. In Denmark, which has one of the world's most progressive Ageing-in-Place Strategies, only 36% of its long-term funding is spend on providing care to Danes in LTC homes.

- To align itself more with Denmark, Ontario could further reduce the proportion of its long-term care spending towards the provision of LTC home based care from 51% to 36% - or a 15% reduction.
- This could be accomplished by gradually reducing its overall current rate of approximately 100,000 LTC home admissions by 15% or 15,000 admissions per year, which is close to the lower end of the 11-30% range of LTC admissions which CIHI notes represents are potentially avoidable.

Putting this information together:

- Ontario currently has 30,000 of its 79,000 beds in need of redevelopment. As noted earlier, the licenses associated with 26,531 beds that are in need of redevelopment across 257 LTC homes will expire by June 30, 2025.
- The Ontario government recently announced that it has approved funding to redevelop 6,796 older beds to modern standards[48] at an ultimate cost of between $212,259 and $268,369 per bed or an average cost of $240,314 per bed or $1.6B.
- If the Ontario government chose not redevelop its remaining 19,735 beds, that are in urgent need of redevelopment, at an average cost of $240,314 this could save it 4.74B in capital costs and potentially be able to support close to 40,000 more individuals to age-in-place with the level of home care that these clients currently appear to require according to the Ministry of Health in Ontario.

- What is being proposed could be potentially achieved without having to increase the Government of Ontario's current overall spending on long-term care services across both its Ministries of Health and Long-Term Care. Furthermore, the enabling of more evidence-based care models such as home-based primary care, re-ablement, as well as this paper's Virtual Long-Term Care @ Home model could likely enable such an approach.
- Finally, if the Government of Ontario chose to significantly advance its general investments in the provision of more home and community care and community support services, but also fund this proposed Virtual Long-Term Care @ Home Program, the resulting savings in not having to build or redevelop 10,000 beds, for example, could result in capital infrastructure costs savings of between $2.12 Billion and $2.68 Billion. Furthermore, the resulting savings in not having to build or redevelop 30,000 beds, for example, could result in capital infrastructure and operating costs savings of between $6.37 Billion and $8.05 Billion.

Minimum 2020 Associated Infrastructure Costs to Build or Redevelop a LTC home Bed in Ontario = $212,259 which consists of a **Minimum Construction Funding Subsidy of $187,336 payable over 25 Years + Minimum Development Grant of $24,923** payable immediately per new LTC bed built or redeveloped.

For 10,000 beds = $2.12B

For 20,000 beds = $4.25B

For 30,000 beds = $6.37B

VS.

Maximum 2020 Associated Infrastructure Costs to Build or Redevelop a LTC home Bed in Ontario = $268,369 which consists of a **Maximum Construction Funding Subsidy of $216,993** payable over **25 Years + Maximum Development Grant of $51,376** payable immediately per new LTC bed built or redeveloped.

For 10,000 beds = $2.68B

For 20,000 beds = $5.37B

For 30,000 beds = $8.05B

Proposed Virtual Long-Term Care @ Home Program Outcome Measurement and Reporting Framework

Each program will need to to collect data to measure key performance indicators related to processes, services, and outcomes to understand and evaluate program functioning and impacts. The key performance indicators should be agreed upon between the Ministries and *Virtual Long-Term Care @ Home* programs prior to their implementation.

This should include mechanisms for tracking key performance metrics reflecting the contributions of the proposed activity to improved patient and system outcomes, and continued cost effectiveness in relation to other available service options.

Mechanisms may include:

- Data collection methods, resources across multiple sectors and provider organizations (e.g. Paramedic Services, Long-Term Care, Ontario Health, Home and Community Care etc.).
- Appropriate definitions, measures, and data collection instruments — using existing ones wherever possible — to evaluate program impacts on patient access, safety, health outcomes, experience, and overall healthcare costs.
- Common approaches to identifying patient population from wait lists, establishing a baseline, tracking performance and progress using shared data, data linkages, quality improvement processes, reporting roles and responsibilities.
- Data/sources/indicators that identify target patient populations, conditions, and care settings where the use of providers can yield the greatest cost savings.
- Tools and resources that promote sharing of outcomes, quality metrics and integrated quality improvement processes. Each program is required to report annually within two months past year end (Q4) to the Ministries on the following indicators:

Table 1: Proposed Virtual Long-Term Care @Home Program Indicators

Outcome Indicator #1:	Outcome Indicator #2:	Outcome Indicator #3:
% Reduction in ED visits 1-year pre/post VLTC@H program enrolment	# of VLTC@H clients LTC home days saved by client/ family choosing to defer a LTC placement offer to remain at home with the VLTC@H program	Estimated # of inpatient ALC days avoided through admission to a VLTC@H program vs waiting for a LTC placement
Process Indicator #1:	**Process Indicator #2:**	**Process Indicator #3:**
Partnerships established between VLTC@H program partners i.e. between LTC Providers, Paramedic Services, Primary Care Providers, Home Care Providers, Community Support Services Agencies and other health system partners	Client, Caregiver and Provider Satisfaction using EuroQol EQ-5D surveys, and/or other ethnographic evaluation methods	Development of a local cost/ benefit analysis and sustainability plan

Proposed Next Steps to Establish Virtual Long-Term Care @ Home Demonstration Programs in Ontario

The MOH and MLTC Should Consider funding up to 5-10 Virtual LTC @ Home Program Demonstration Programs to support between 120-150 clients per year at $44,815 - $67,510 per enrollee, per year for an initial 3-year period of funding.

A Call for Proposals should be released in early 2021 to allow applications from community-based teams, with the support of their corresponding OHTs, that propose to come together to offer a *Virtual LTC @ Home* program.

Programs would work with their corresponding Local Health Integration Network (LHIN) Home Care Program to identify potential enrollees on existing LTC home waitlists who are either waiting in hospital or at home for a LTC home bed. They could also potentially enroll persons currently living in an LTC home who would like to try returning to a community-based residence where their needs could be met under this new program.

An initial application to the Ministries could establish how many clients a *Virtual LTC @ Home Program* demonstration program could serve, the strength of the team proposing to collaborate, as well as a clear articulation of how they will operationalize their *Virtual LTC @ Home* demonstration program. Further, it could serve to show how this model of care could be a more innovative and cost-effective approach, respecting and supporting client choice and autonomy.

Each approved program would be able to access up to $750K to help pay for local capital costs associated with establishing their *Virtual LTC @ Home* program (e.g., purchasing remote patient monitoring equipment, client transportation vehicles, and for renovations to expand a local adult day program setting).

- 1 Program with 150 enrollees would account for $6.72M to $10.13M per year depending on each enrollee's income and $750K in initial capital costs to support a program with 150 enrollees at any given time.

A *Virtual LTC @ Home* program should be able to count each of its enrollees as those being supported in an equivalent LTC home bed.

An overall demonstration program with 1,500 enrollees could be evaluated for its effectiveness in supporting its enrollees to delay or even avoid having to accept a placement in an LTC home if their needs can be appropriately met through this more cost effective and flexible alternative form of long-term care. Supporting a maximum of 10 programs with a maximum of 150 enrollees per program would likely represent an annual investment of approximately $100M assuming that upwards of half the enrollees will not require a full LTC home equivalent subsidy based on their incomes.

If this model and approach prove to be a successful and popular alternative to LTC home placements – this could allow the MLTC and MOH to open more *Virtual LTC @ Home* program "beds" within the government's current mandate. Eventually, it could allow the MLTC to support its current commitment of establishing 30,000 new 'beds' within this decade and support the actual redevelopment of existing beds or the transitioning of existing LTC home bed licenses to Virtual LTC @ Home "licenses", of which approximately 26,531, across 257 LTC homes, are set to expire on June 30, 2025.

In order for this proposed *Virtual LTC @ Home Program* to be successful as a cost-effective alternative model of care, it should be allowed to operate outside the *Ontario Long-Term Care Homes Act* and thus would not be subject to the same regulatory framework that covers current licensed LTC home beds but rather more in line with the *Home Care and Community Services Act* or the *Connected Care Act* and the new home and community care regulatory framework being developed following the passing of Bill 175, *Connecting People to Home and Community Care Act, 2020*. It could allow the Ontario Government to show that it is taking more immediate action to address hallway healthcare and tackle its current LTC home waitlists in additional innovative ways, which are also more in line with the rapidly evolving preferences and values of Ontarians, especially with respect to meeting their current and future long-term care needs.

Appendix A: Understanding the Current Provincial Funding Formulas for the Provision of Care in Ontario LTC Homes:[25]

- $4.6 billion (7% of the overall provincial health budget) is currently budgeted for the provision of Long-Term Care in Ontario in 2020.
- The above amount works out to **$201.36** per resident/per day **($73,496** per resident/per year) across 79,000 LTC or LTC home beds which is comprised of:
  - **$184.96*/**** per resident/per day **($67,510** per resident/per year) comprised of
    - $102.34 per resident/per day for nursing and personal care (such as assistance with personal hygiene, bathing, eating, and toileting)
    - $12.06 per resident/per day for specialized therapies, recreational programs, and support services
    - $9.54 per resident/per day for raw food (ingredients used to prepare meals)
    - $56.52 per resident/per day for Other Accommodations (OA) (non-clinically related operating costs of a home i.e. housekeeping services, buildings and property operations and maintenance, dietary services (nutrition/hydration services), laundry and linen, general and administrative services, and facility costs.
    - $4.50 per resident/per day additional global per diem. This amount may be used in any of the four LOC envelopes mentioned above. Up to 32%of this amount may be allocated to the OA envelope.
    - *All residents are expected to contribute towards the cost of their meals and accommodation through co-payments of at least $62.18 per day for basic accommodation in an Ontario LTC home, furthermore, approximately 35% of Ontario LTC home residents receive financial assistance with these costs from the Ontario Ministry of Long-Term Care.

The basic co-payment amount is factored in to the basic $184.96 per resident/per day cost provincial funding formula. Other residents choosing semi-private or private accommodation are charged higher co-payments of up to $88.82 per resident/per day, this additional amount supplements the basic $184.96 per resident/per day cost provincial funding formula and goes directly to the LTC home as additional revenue associated with the costs of providing enhanced accommodations.

- **Without the minimum $62.18 per day co-payment[25], the provincial or MLTC contribution for the basic provision of LTC in an Ontario LTC home is **$122.78 per resident/per day = ($184.96 MINUS $62.18)**

Additional supplemental costs associated with providing LTC home care are outlined further:

- **$16.4** per resident/per day **($6,000** per resident/per year) additionally being spent by the MLTC to provide supplementary funding for specialized supports, capital and other initiatives and other program initiatives designed to benefit LTC home residents overall in Ontario but may not specifically impact each resident's care equally. As of 2018 supplementary costs for providing Long-Term Care in Ontario can include:
  - Capital infrastructure costs associated with the development and re-development of LTC homes. Amounts of **$187,336 to $216,993** per new LTC home bed built or redeveloped are being offered to LTC home operators as a **$20.53-$23.78** per resident/per day *Construction Funding Subsidy* amortized over 25 years. Furthermore, an additional **$24,923 to $51,376** is now being offered as a *Maximum Development Grant* per new LTC bed built or redeveloped from 2018 onwards.[27]
  - It should be noted that homes built or redeveloped prior to 2018 are also receiving a previously determined per resident, per day *Construction Funding Subsidy* amortized over 25 years but no additional *Development Grant*.[27]
- **$52.64** per resident/per day **($19,214** per resident/per year) additionally new costs being proposed to support the Ontario Government's recent announcement that it will move towards providing at least 4 hours of direct care per resident per day by 2024-25 from its current level of 2 hours and 45 minutes will likely further add at least $1.52 Billion (in 2020 dollars) to hire more staff and/or increase current hours of work for existing staff in order to meet the new standard.[24]

Appendix B: A Brief Overview of the PACE Model of Care from the United States:[49]

- PACE (Program of All-Inclusive Care for the Elderly) Programs have become a popular model used to serve older and poor adults across the United States eligible for a LTC home Placement. Although all PACE participants are eligible for LTC home care, 95% continue to live at home.
- Enrollment Criteria are Age 55+, LTC home Eligible, and able to live safely in the Community with the Support of a PACE Program. Currently – 51,000 (20,000 in 2011) people were enrolled in 260 PACE Programs across 31 States.
- The average PACE client is 76 years old and has multiple, complex medical conditions, cognitive and/or functional impairments, and significant health and long-term care needs. 26% of PACE Enrollees need assistance with 1-2 Activities of Daily Living (ADLs), 25% with 3-4 ADLs and 35% with 5-6 ADLs; 46% have dementia; and the average client lives with 5.8 Chronic Conditions i.e.; CHF, COPD etc. Many PACE enrollees are functionally homebound.
- PACE organizations provide the entire continuum of medical care and long-term services and supports required by frail older adults. These include primary and specialty medical care; in-home services; prescription drugs; specialty care such as audiology, dentistry, optometry, podiatry and speech therapy; respite care; transportation; adult day services, including nursing, meals, nutritional counseling, social work, personal care, and physical, occupational and recreational therapies; and hospital and LTC home care, when necessary.
- PACE Programs are provided capitated funding per enrollee to cover their personal, medical and even hospital care costs. It becomes the responsibility of the PACE Programs to be creative with their funding to provide comprehensive primary, community and home-based care that keeps enrollees out of hospital. PACE Enrollees as a result average less than 1 ED Visit per year, and have achieved a 24% lower hospitalization rate and 16% lower re-hospitalization rate for similar non-PACE clients. PACE participants also have a low risk of eventually being admitted to a LTC home. Finally, PACE was found to reduce family caregiver burden and provide support to improve family caregiving.

- Numerous studies have indicated the effectiveness of PACE programs at reducing ED visits, hospitalizations and readmissions to hospitals. A 2014 review noted that in comparison to the Medicare program and its users, PACE is cost-neutral and results in fewer hospitalizations.[50,51] In this review, the study with the strongest evidence rating found that PACE program participants had a 25-30% less chance of being hospitalized than those in their matched comparison group.[50] Also, the intervention's readmission rates have been found to be 16% lower than the general 22.9% rate that exist for the Medicare program population of individuals 65 years of age and older.[52]

- Additional studies have indicated the effectiveness of PACE programs at reducing the chances of admissions to LTC homes. One study noted that participants of PACE programs had a 31% lower chance of LTC home admissions, compared to those part of state-level home-and community-based services (HCBS) waiver programs that generally allow a state to meet the needs of a particular population who prefer to get long-term care services and supports in their home or community, rather than in an institutional setting.[53] Another study indicated that after 3 years of enrollment in a PACE program only 15% of its enrollees ended up in LTC homes[54] and only 5% of PACE participants currently live in LTC homes according to the National PACE Association.[55] Additionally, PACE programs have been found to reduce family caregiver burden and provide support to improve family caregiving.

- How does PACE ensure quality care and cost-effectiveness? PACE emphasizes the following processes, which are recognized as highly effective in the provision of primary care for community-based older adults with complex care needs:

    - Development of a comprehensive participant assessment that includes a complete review of all medical, functional, psychosocial, lifestyle and values issues;
    - Creation and implementation of a care plan that addresses all health and long-term care needs;
    - Communication and care coordination among all those who provide care for the participant; and
    - Promotion of participant and caregiver engagement in health care decision-making.

Furthermore, because PACE organizations are fully responsible for the quality and cost of all care provided, they have a financial incentive to provide all necessary care.

More information is available at: https://www.npaonline.org/start-pace-program/understanding-pace-model-care

References

[1] National Institute on Ageing (NIA). (2019 September). *Enabling the Future Provision of Long-Term Care in Canada*. Retrieved from: https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/5d9de15a38dca21e46009548/1570627931078/Enabling+the+Future+Provision+of+Long-Term+Care+in+Canada.pdf

[2] Ministry of Long-Term Care. (2020 July 17). *Ontario Driving Development of New Long-Term Care Homes (Modernized Funding Model)*. Retrieved from: http://www.health.gov.on.ca/en/pro/programs/ltc/memo_20200717-2.aspx

[3] Organization for Economic Co-Operation and Development (OECD). (2017). Health at a Glance 2017: OECD Indicators. Retrieved from: https://read.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2017_health_glance-2017-en#page216

[4] Sinha, S. (2012). *Living Longer, Living Well – Report Submitted to the Minister of Health and Long-Term Care and the Minister Responsible for Seniors on Recommendations to Inform a Seniors Strategy for Ontario.* Retrieved from: http://www.health.gov.on.ca/en/common/ministry/publications/reports/seniors_strategy/docs/seniors_strategy_report.pdf

[5] Financial Accountability Office of Ontario. (2018). Ontario Health Sector: An Updated Assessment of Ontario Health Spending. Retrieved from: https://www.fao-on.org/web/default/files/publications/Health%20Sector%20Mar%202018/Health%20Sector%20Update%202018.pdf

[6] Ontario Ministry of Health. (2019 December 5). *Published plans and annual reports 2019-2020: Ministry of Health and Long-Term Care*. Retrieved from: https://www.ontario.ca/page/published-plans-and-annual-reports-2019-2020-ministry-health-long-term-care

[7] Ministry of Health and Long-Term Care (MOHLTC). (2018). *Home and Community Care Statistics in Ontario.*

[8] Financial Accountability Office of Ontario (FAO). (2019). *Long-Term Care Homes Program: A Review of the Plan to Create 15,000 New Long-Term Care Beds in Ontario*. Retrieved from: https://www.fao-on.org/en/Blog/Publications/ontario-long-term-care-program

[9] Sinha, S. (2018 June 4). The prescription to fix hallway medicine once and for all. *The Toronto Star: Opinion.* Retrieved from: https://www.thestar.com/opinion/contributors/2018/06/04/the-prescription-to-fix-hallway-medicine-once-and-for-all.html

[10] Ontario Ministry of Long-Term Care. (2019 October 1). *Ontario One Step Closer to Creating 15,000 New Long-Term Care Beds.* Retrieved from: https://news.ontario.ca/en/release/53992/ontario-one-step-closer-to-creating-15000-new-long-term-care-beds

[11] Ontario Office of the Premier. (2020 July 15). *News Release: Ontario Accelerating the Development of Long-Term Care Homes.* Retrieved from: https://news.ontario.ca/en/release/57613/ontario-accelerating-the-development-of-long-term-care-homes

[12] Ontario Ministry of Long-Term Care. (2020 September). *Long-Term Care Home Licensing Framework*. Retrieved from: http://www.ltccommission-commissionsld.ca/cm/pdf/LTC_Licensing_Foundational.pdf

[13] Gibson, V. (2020 May 20). Ontario long-term care homes faced 3 times more respiratory infection outbreaks than retirement homes from 2014-19. *iPolitics*. Retrieved from: https://ipolitics.ca/2020/05/20/ontario-long-term-care-homes-faced-3-times-more-respiratory-infection-outbreaks-than-retirement-homes-from-2014-19/

[14] National Institute on Ageing Long-Term Care COVID-19 Tracker Open Data Working Group. *NIA Long-Term Care COVID-19 Tracker*. Accessed November 3, 2020. Retrieved from: https://ltc-covid19-tracker.ca/

[15] Brown, K., A., Jones, A., Daneman, N., Chan, A.K., Schwartz, K.L., … & Stall, N.M. (2020). Association between nursing home crowing and COVID-19 Infection and Mortality in Ontario, Canada. *JAMA Internal Medicine.* Doi:10.1001/jamainternmed.2020.6466

[16] Smith Cross, J. (2020 September 29). Some Ontario LTC homes under pressure to return to dangerous levels of overcrowding: Association. QP Briefing. Retrieved from: https://www.qpbriefing.com/2020/09/29/some-ontario-ltc-homes-under-pressure-to-return-to-dangerous-levels-of-overcrowding-association/

[17] National Institute on Ageing/Telus Health. (2020 October). *Pandemic Perspective on Ageing in Canada in Light*

of COVID-19: Findings from a National Institute on Ageing/ Telus Health National Survey. Retrieved from: https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/5f85fe24729f041f154f5668/1602616868871/PandemicPerspectives+oct13.pdf

[18] Bring Health Home in partnership with ONE Persuades Research. (2020 June). Bring Health Home Survey.

[19] Queen's Printer for Ontario. (2020). *Ontario's Action Plan: Protect, Support, Recover.* Retrieved from: https://budget.ontario.ca/2020/pdf/2020-ontario-budget-en.pdf

[20] Ontario Long Term Care Association. (2017 October 25). *Backgrounder.* Retrieved from: https://www.oltca.com/OLTCA/Documents/Reports/2017OLTCANanosPollBackgrounder.pdf

[21] Ontario Long Term Care Association. (2018 February). Member Human Resource Survey.

[22] Queen's Printer for Ontario. (2020 February 13). *Backgrounder: Long-Term Care Staffing Study Advisory Group.* Retrieved from: https://news.ontario.ca/en/backgrounder/55784/long-term-care-staffing-study-advisory-group#content

[23] Ontario's Office of the Premier. (2020 November 2). *Province Increasing Direct Care for Long-Term Care Residents to Four Hours per Day.* Retrieved from: https://news.ontario.ca/en/release/59030/province-increasing-direct-care-for-long-term-care-residents-to-four-hours-per-day

[24] Block, S. & Dhunna, S. (2020 June). *What does it cost to care? Improving wages and staffing levels in Ontario's long-term care facilities*. Retrieved from: https://www.policyalternatives.ca/sites/default/files/uploads/publications/Ontario%20Office/2020/06/Improving%20care%20in%20Ontario%20LTC%20facilities_final.pdf

[25] Ontario Ministry of Long-Term Care. (2020 September 24). *Long-Term Care Overview: Funding and Staffing.* Retrieved from: http://www.ltccommission-commissionsld.ca/presentations/pdf/Long-Term_Care_Staffing_and_Funding_Overview.pdf

[26] The Canadian Press. (2020 July 15). Ontario changes long-term care building fund in bid to spur construction. *CityNews.* Retrieved from: https://toronto.citynews.ca/2020/07/15/ontario-building-long-term-care-homes/

[27] Ontario Ministry of Long-Term Care. (2020 September 10). *Long-term care Home Capital Development Funding Policy, 2020.* Retrieved from: https://www.ontario.ca/page/long-term-care-home-capital-development-funding-policy-2020

[28] Canadian Institute for Health Information. (2018). *Continuing Care Reporting System: Profile of Residents in Continuing Care Facilities 2017–2018*. Ottawa: CIHI.

[29] Ontario. (September 2020). *Capacity Planning and Analytics Division.* Retrieved from: http://www.ltccommission-commissionsld.ca/presentations/pdf/LTCC_Capacity_Planning_and_Analytics_Overview.pdf

[30] Canadian Institute for Health Information. (2020 August). *Common Challenges, Shared Priorities – Measuring Access to Home and Community Care and to Mental Health and Addictions Services in Canada.* Retrieved from: https://www.cihi.ca/sites/default/files/document/common-challenges-shared-priorities-vol-2-report-en.pdf

[31] Ontario Ministry of Long-Term Care. (2020 May 11). *COVID-19 action plan: long-term care homes.* Retrieved from: https://www.ontario.ca/page/covid-19-action-plan-long-term-care-homes

[32] Ontario Ministry of Health. (2019 September 11). *Ontario Expanding Home and Community Care Services.* Retrieved from: https://news.ontario.ca/en/release/53696/ontario-expanding-home-and-community-care-services

[33] Home Care Ontario. (2020 September 25). *Home Care Ontario Commends Government Investments to Help More Ontarians Stay Safe at Home.* Retrieved from: https://www.newswire.ca/news-releases/home-care-ontario-commends-government-investments-to-help-more-ontarians-stay-safe-at-home-832921115.html

[34] Queen's Printer for Ontario. (2020). *Ontario's Action Plan 2020: Responding to COVID-19.* Retrieved from: https://budget.ontario.ca/2020/marchupdate/action-plan.html

[35] Ontario Home and Community Care Branch. (2018 December 5). Presentation to the Premier's Council on Improving Healthcare & Ending Hallway Medicine.

[36] Hirdes, J.P., Poss, J.W., & Curtin-Telegdi, N. (2008). The Method for Assigning Priority Levels (MAPLe): a new decision-support system for allocating home care resources. *BMC medicine, 6(1),* 9. https://doi.org/10.1186/1741-7015-6-9

[37] Betini, R.S., Hirdes, J.P., Lero, D.S., Cadell, S., Poss, J., & Heckman, G. (2017). A longitudinal study looking at and beyond care recipient as a predictor of long term care home

admission. *BMC Health Services Research, 17(1),* 709. https://doi.org/10.1186/s12913-017-2671-8

[38] Costa, A.P., & Hirdes, J.P. (2010). Clinical characteristics and service needs of alternate-level-of-care patients waiting for long-term care in Ontario hospitals. *Healthcare Policy, 6(1),* 32.

[39] Sinn, C.L.J., Betini, R.S.D., Wright, J., Eckler, L., Chang, B.W., Hogeveen, S., … & Hirdes J.P. (2018). Adverse events in home care: identifying and responding with interRAI scales and clinical assessment protocols. *Canadian Journal on Aging/ La Revue canadienne du vieillissement, 37(1),* 60-69. https://dx.doi.org/10.1017%2FS0714980817000538

[40] Health Quality Ontario. (n.d.). *Home Care Performance in Ontario.* Retrieved from: https://www.hqontario.ca/System-Performance/Home-Care-Performance on November 9_2020.

[41] Gilmour, H. (2018). Unmet home care needs in Canada. *Statistics Canada, Health Reports, 29(11),* 3-11. Retrieved from: https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2018011/article/00002-eng.pdf?st=JplTTFjP

[42] Kuluski, K., Im, J., & McGeown, M. (2017). "It's a waiting game" a qualitative study of the experience of carers of patients who require an alternate level of care. *BMC Health Services Research, 17(1),* 318. https://dx.doi.org/10.1186%2Fs12913-017-2272-6

[43] Ontario Hospital Association (OHA). (2019 December). *Ontario Hospitals – Leaders in Efficiency.* Retrieved from: https://www.oha.com/Documents/Ontario%20Hospitals%20-%20Leaders%20in%20Efficiency.pdf

[44] Fagan, L. (2019 December 9). Blocked beds costing Ottawa hospitals millions. *CBC News.* Retrieved from: https://www.cbc.ca/news/canada/ottawa/health-care-hospitals-patients-home-care-long-term-care-1.5385572

[45] Verma, A.A., Klich, J., Thurston, A., Scantlebury, J., Kiss, A., Seddon, G., & Sinha, S.K. (2018). Paramedic-initiated home care referrals and use of home care and emergency medical services. *Prehospital Emergency Care, 22(3),* 379-384. Doi: 10.1080/10903127.2017.1387627

[46] Brohman, M.K., Green, M.E., Dixon, J., Whittaker, R., & Fallon, L. (2018). Community Paramedicine Remote Patient Monitoring (CPRPM): Benefits Evaluation & Lessons Learned, 2015/17. Toronto: ON: Canada Health Infoway. Retrieved from: https://www.infoway-inforoute.ca/en/component/edocman/resources/reports/benefits-evaluation/3542-community-paramedicine-remote-patient-monitoring-cprpm-benefits-evaluation-lessons-learned

[47] Canadian Institute for Health Information. (2017). Seniors in transition: Exploring pathways across the care continuum. https://www.cihi.ca/sites/default/files/document/seniors-in-transition-report-2017-en.pdf

[48] Ontario Ministry of Long-Term Care. (2020 November 12). Funding for long-term care home development. Retrieved from: https://www.ontario.ca/page/funding-long-term-care-home-development

[49] National Pace Association (NPA). (2019). *Fact Sheet – PACE: Frequently Asked Questions.* Retrieved from: https://www.npaonline.org/sites/default/files/PACE%20FAQs%20Oct%202019.pdf

[50] Ghosh, A., Orfield, C., & Schmitz, R. (2014). Evaluating PACE: A review of the literature. U.S. Department of Health and Human Services. https://aspe.hhs.gov/system/files/pdf/76976/PACELitRev.pdf

[51] IHI Multimedia Team. (2018). A safe alternative to nursing homes. Institute for healthcare improvement. http://www.ihi.org/communities/blogs/a-safe-alternative-to-nursing-homes#:~:text=Of%20the%20studies%20included%20in,than%20a%20matched%20comparison%20group.

[52] Segelman, S. (2014). Hospitalizations in the Program of All-Inclusive Care for the Elderly. Journal of the American Geriatrics Society (JAGS), 62(2), 320–324. https://doi.org/10.1111/jgs.12637

[53] Segelman, M., Cai, X., van Reenen, C., & Temkin-Greener, H. (2017). Transitioning From Community-Based to Institutional Long-term Care: Comparing 1915(c) Waiver and PACE Enrollees. The Gerontologist, 57(2), 300–308. https://doi.org/10.1093/geront/gnv106

[54] Friedman, S. M., Steinwachs, D. M., Rathouz, P. J., Burton, L. C., & Mukamel, D. B. (2005). Characteristics predicting nursing home admission in the program of all-inclusive care for elderly people. The Gerontologist, 45(2), 157–166. https://doi.org/10.1093/geront/45.2.157

[55] National PACE Association. (n.d.). PACE by the numbers: Programs of All-Inclusive Care for the Elderly. https://www.npaonline.org/sites/default/files/pace_infographic_update_final_0319.pdf

To learn more about the NIA visit our website at **http://www.ryerson.ca**/nia and follow us on twitter **@RyersonNIA**

NATIONAL INSTITUTE ON AGEING